

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Piedmont Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Philip Morris USA, Inc. – Park 500
4100 Bermuda Hundred Road-Chester, Virginia
Permit No. PRO50722

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Philip Morris USA, Inc. has applied for a Title V Operating Permit for its RL Plant, located in Chesterfield County, Virginia. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:

Air Permit Manager:_____ Date:

Regional Permit Manager:_____ Date:

FACILITY INFORMATION

Permittee

Philip Morris USA, Inc.
P.O. Box 26603
Richmond, VA 23261

Facility

Philip Morris USA, Inc. – Park 500
4100 Bermuda Hundred Road
Chester, VA 23836-3244

AIRS ID No. 51-041-0081

SOURCE DESCRIPTION

SIC Code Description:

Major Group 21: Tobacco Products

2141 Tobacco Stemming and Redrying

Establishments primarily engaged in the stemming and redrying of tobacco or in manufacturing reconstituted tobacco.

Tobacco thrashing (mechanical stemming)

Tobacco, stemming and redrying

Facility Description:

RL Plant:

Ground tobacco components are combined with a liquid solution to produce a reconstituted tobacco “sheet” commonly called Reconstituted Leaf (RL) at the Philip Morris USA, Incorporated (PMUSA, Inc.) Park 500 Complex in Chesterfield County, Virginia (SIC Code 2141). At the Park 500 Complex RL facility, tobacco components are unpacked from containers, crushed, and blended together in the Receiving and Blending area. In the Stock Preparation/Pulping area, these raw materials are combined with water and processed to separate fibers from the liquid. The resulting stock is applied onto sheet forming equipment; tobacco solubles and flavors are applied; and the sheet is dried and cut into small pieces. The completed RL product is then packed into

containers for shipment to a warehouse or another PMUSA, Inc. facility.

The facility is a Title V major source of VOCs along with being a PSD major source. This source is located in an attainment area for all pollutants except for NOx and VOC. This area has been designated as nonattainment for NOx and VOC. The facility was previously permitted under several Minor NSR Permits issued on August 19, 2004, August 18, 2004, June 30, 2004, December 11, 1995, and December 5, 1977 along with the June 26, 1981 permit amendment, and the July 9, 1974 permit. The facility was also previously permitted under a PSD Permit originally issued on May 20, 1981, and reissued on April 2, 1984 to be consolidated with another permit issued on December 9, 1980 as amended on June 26, 1981. However, this PSD permit was amended on August 23, 2004 and the April 2, 1984 PSD permit was superseded.

COMPLIANCE STATUS

The facility is inspected once a year. The facility has been found to be in compliance on September 9, 2004 inspection date.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
Park 500 – RL Plant							
B1 BO 0501	AE-38	Babcock & Wilcox Boiler, constructed in 1996	143 mmbtu/hr (Manufacturer's Continuous Rating) MCR when burning fuel oil No. 2 F.O. (P) No. 6 F.O. (S) 146 mmbtu/hr when burning Nat. Gas (S) & LP Gas (S)	Multicyclone Joy Mfg. 35-7, D.E. = 90%	CY0101	PM	12/11/95 Permit

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description *	PCD ID	Pollutant Controlled	Applicable Permit Date
B2 BO 0201	AE-42	Babcock & Wilcox Boiler (Stirling Power) – Wall-fired, constructed in 1978	237 mmbtu/hr (Manufacturer's Continuous Rating) MCR Bit. Coal (P) No. 6 F.O. (S) No. 2 F.O. (S)* *: No. 2 is for ignition & flame stabilization	Electrostatic Precipitator (cold side) Flakt FAA 4x28-63-80-2, D.E. = 99.6%	PE0101	PM	12/5/77 Permit & 6/26/81 Permit amendment
B3 BO 0301	AE-47	Combustion Engineering Tangentially Fired Boiler, constructed in 1982	237 mmbtu/hr (Manufacturer's Continuous Rating) MCR Bit. Coal (P) No. 6 F.O. (S) No. 2 F.O. (S)* *: No. 2 is for ignition & flame stabilization	Electrostatic Precipitator (cold side) Flakt FAA 4x28-63-80-2, D.E. = 99.6%	PE0201	PM	8/23/04 Permit
Generators							
024W1 EG0101	AE-I1	Water Treatment Plant Diesel Generator, constructed in 1981	Electrical Power 2,928 kW/hr Output BHP 1,490	-	-	-	8/18/04 Permit

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description *	PCD ID	Pollutant Controlled	Applicable Permit Date
024W2 EG0101	AE-77	Waste Water Treatment Plant Diesel Generator, Cummins, constructed in 1981	Electrical Power 2,928 kW/hr Output BHP 1,490	-	-	-	8/18/04 Permit
Coal and Ash Handling Operations							
CH0101	Fug.	Coal Handling and Storage Equipment (coal car shakers, coal crushers, various conveyors and coal silos)	300 tons/hr (combined between the two permits)	Wet Suppression , D.E. = 90%		PM	8/23/04
	AE-81			Baghouse D.E. = 99%	B2BH0801	PM	12/5/77 and 8/23/04
	AE-B1-B3, AE-A1-A9			Twelve Baghouses D.E. = 99%	B2BH0101 through B2BH0112	PM	12/5/77 and 8/23/04
AH0101	AE-48	Ash Handling and Storage Equipment (cyclones, silos, and conveying systems)	30 tons/hr (combined between the two permits)	Baghouse D.E. = 99%	B2BH0601	PM	12/5/77 and 8/23/04
	AE-83			Baghouse D.E. = 99%	B2BH0501		
	AE-45			Baghouse D.E. = 99%	B2BH0701		
	AE-43	Fly Ash Handling System (subset of Ash Handling Equipment)	15 tons/hr	Baghouse D.E. = 99%	B2BH0301	PM	8/23/04

Tobacco Processing Equipment

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description *	PCD ID	Pollutant Controlled	Applicable Permit Date
(DC0401 to DC0408) (BW0401 to BW0408) (DC0301 to DC0306 and DC0207) (BW 0301 to BW0307) (HM0201 to HM0204 and HM0101) And BC0301	AE-77 & AE-78	Receiving and Blending Area (Tobacco Receiving and Blending Equipment)	80.65 tobacco process P5BA units/hr	Two Baghouses, D.E.= 99% & D.E.= 99%	L1BH0501 & L1BH0601	PM	8/18/04 Permit
L1CY0101 L1CY0102 L2CY0101 L2CY0102	AE-01	Pulping (pneumatic transfer)	20.76 tobacco process P5FA units/hr	Four Baghouses D.E. = 99%	L1BH0301 L1BH0302 L2BH0301 L2BH0302	PM	7/9/74 Permit as updated in 12/5/77 Permit
L1 DD0101	AE-08	Tobacco Drying	86.94 tobacco process P5FA units/hr	Mechanical Scrubber D.E.= 90/40%	L1SC0101	PM/VOC	7/9/74 Permit as updated in 12/5/77 Permit

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description *	PCD ID	Pollutant Controlled	Applicable Permit Date
L1 DT0101	AE-09	Tobacco Drying		Orifice Scrubber, D.E.= 90/40%	L1SC0201	PM/VOC	7/9/74 Permit as updated in 12/5/77 Permit
L1 DR0101	AE-10	Tobacco Drying		Orifice Scrubber, D.E.= 90/40%	L1SC0301	PM/VOC	7/9/74 Permit as updated in 12/5/77 Permit
L2 DD0101	AE-22	Tobacco Drying		Mechanical Scrubber, D.E.= 90/40%	L2SC0101	PM/VOC	12/5/77 Permit
L2 DT0101	AE-23	Tobacco Drying		Orifice Scrubber, D.E.= 90/40%	L2SC0201	PM/VOC	12/5/77 Permit
L2 DR0101	AE-26	Tobacco Drying		Orifice Scrubber, D.E.= 90/40%	L2SC0301	PM/VOC	12/5/77 Permit
L1 PP0101 & PP0102 L1 PP0201 & PP0202	AE-11	Packing	53.77 tobacco process P5FA units/hr	Baghouse, D.E.= 99%	BH0701	PM	7/9/74 Permit as updated in 12/5/77 Permit
L3 DD0101	AE-32	Tobacco Drying (Dryer)	26.88 tobacco process P5PA units/hr	Mechanical Scrubber D.E.= 90/40%	L3SC0101	PM/VOC	6/30/04 Permit
L3 DT0101	AE-33	Tobacco Drying (Dryer)		Orifice Scrubber, D.E.= 90/40%	L3SC0201	PM/VOC	6/30/04 Permit
L3 DR0101	AE-34	Tobacco Drying (Dryer)		Cyclone Scrubber, D.E.= 90/40%	L3SC0301	PM/VOC	6/30/04 Permit

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description *	PCD ID	Pollutant Controlled	Applicable Permit Date
L3 PP0101, PP0102, & PP0103	AE-35	Packing and Process Ventilation (Packers)	26.88 tobacco process P5PA units/hr	Baghouse, D.E.= 99%	BH0301	PM	6/30/04 Permit
Other Process							
L3TK4501		2,400 gallon Blending Tank	740 gal/hr associated with dry flavor operation				
L3MT0801		2,400 gallon Holding Tank					
L3TK4601		Dry Tobacco Flavoring Dump Station	1,000 lbs/hr	Fabric Filter, D.E. = 99%	L3SF0301	PM	8/19/04 Permit
L3 TK4901 L3 TK4902		8,000 gallon (each) Propylene Glycol Storage Tanks					

* The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

* D.E.: Design Efficiency

EMISSIONS INVENTORY

A copy of the 2003 annual emission update is available. The 2003 Emissions are summarized in the following tables.

2003 Actual Emissions				
Facility Wide Criteria Pollutant Emission in Tons/Year				
VOC	CO	SO ₂	PM ₁₀	NO _x
310.3	32.5	1778.9	50.8	1097.2

2003 Facility Wide Hazardous Air Pollutant Emissions

Pollutant	Hazardous Air Pollutant Emission in Tons/Year
Acetophenone	0.0009
Acetaldehyde	0.0343
Acrolein	0.0174
Arsenic Compounds	0.0247
Beryllium Compounds	0.0013
Biphenyl Compounds	0.0002
Bromoform	0.0023
Methylbromide	0.0096
Benzene	0.0782
Benzyl Chloride	0.0421
Cadmium Compounds	0.0031
2-Chloroacetophenone	0.0004
Hexachlorobenzene	0.0219
Chlorobenzene	0.0013
Ethyl Chloride	0.0025
Chloroform	0.0035
Methyl Chloride	0.0319
Cyanide Compounds	0.1504
Cobalt Compounds	0.0060
Chromium Compounds	0.0071
Carbon Disulfide	0.0078
Ethyl Dibromide	0.00007
BIS 2-ethylhexylphthalate	0.0044
Dimethyl Sulfate	0.0029
2,4 – Dinitrotoluene	0.00002
Ethylbenzene	0.0057
Ethylene Dichloride	0.0013
Formaldehyde	0.0144
Hydrochloric Acid	114.2717
Hydrogen Fluoride	13.8329
Mercury Compounds	0.0023
Cumene	0.0003

Isophorone	0.0348
Methylene Chloride	0.0174
Manganese Compounds	0.0295
Methyl Tert-Butyl Ether	0.0021
Methyl Ethyl Ketone	0.0235
Methyl Methacrylate	0.0012
Methyldiazine	0.0102
Ammonia	29.1162
Hexane	0.0040
Nickel Compounds	0.0168
Napthalene	0.0002
Lead	0.0258
Tetrachloroethylene	0.0132
Phenol	0.0010
Phosphine	0.1440
Propionaldehyde	0.0229
Antimony Compounds	0.0011
Selenium Compounds	0.0782
Styrene	0.0015
1,1,2 – Trichloroethane	0.0007
2,4 Toluene Diisocyanate	0.0005
Toluene	0.0144
Vinyl Acetate	0.0005
Xylenes	0.0113

I. EMISSION UNIT APPLICABLE REQUIREMENTS

Fuel Burning Equipment Requirements (emission unit ID#: B1, BO 0501)

A. Limitations

1. Emissions from the operation of the gas-and oil-fired boiler (emission unit ID#: B1, BO 0501) shall not exceed the limits specified below when firing **LP gas**:

TSP/PM-10		1.0	lbs/hr
Sulfur Dioxide		1.6	lbs/hr
Nitrogen Oxides (as NO ₂)	0.125 lbs/MMBtu	18.3	lbs/hr
Carbon Monoxide		5.1	lbs/hr
Volatile Organic Compounds		0.8	lbs/hr
(9 VAC 5-80-110, and Condition 12 of 12/11/95 Permit)			

- *The NO_x emissions limit of 0.125 lbs/mmBtu is BACT for a low NO_x burner. There are no NO_x emission standards for LPG under NSPS D_b, 40 CFR 60.44b.*

2. Emissions from the operation of the gas-and oil-fired boiler (emission unit ID#: B1, BO 0501) shall not exceed the limits specified below when firing **No. 2 fuel oil**:

TSP/PM-10	0.1	lbs/MMBtu	3.2 lbs/hr
Sulfur Dioxide			71.5 lbs/hr
Nitrogen Oxides (as NO ₂)	0.2	lbs/MMBtu	28.6 lbs/hr

Carbon Monoxide 5.2 lbs/hr

Volatile Organic 0.3 lbs/hr
Compounds

(9 VAC 5-80-110, NSPS D_b, and Condition 13 of 12/11/95 Permit)

- *The TSP/PM-10 emissions limit of 0.1 lbs/mmBtu is the required TSP/PM-10 particulate emission standard as per NSPS D_b, 40 CFR 60.43b(b) which combusts oil (or mixtures of oil with other fuels). Nitrogen oxides emissions limit of 0.2 lbs/mmBtu is the required nitrogen oxides emission standard for NSPS D_b, 40 CFR 60.44b(a) when firing natural gas and distillate oil, except (4) which has a high heat release rate.*

3. Emissions from the operation of the gas-and oil-fired boiler (emission unit ID#: B1, BO 0501) shall not exceed the limits specified below when firing **No. 6 fuel oil**:

TSP/PM-10 **0.1 lbs/MMBtu** 3.2 lbs/hr

Sulfur Dioxide 71.5 lbs/hr

Nitrogen Oxides **0.4 lbs/MMBtu** 57.2 lbs/hr
(as NO₂)

Carbon Monoxide 4.9 lbs/hr

Volatile Organic 0.3 lbs/hr
Compounds

(9 VAC 5-80-110, NSPS D_b , and Condition 14 of 12/11/95 Permit)

- *The TSP/PM-10 emissions limit of 0.1 lbs/mmBtu is the required TSP/PM-10 particulate emission standard as per NSPS D_b, Part 40, 60.43b(b) which combusts oil (or mixtures of oil with other fuels). Nitrogen oxides emissions limit of 0.4 lbs/mmBtu is the required nitrogen oxides emission standard for NSPS D_b, Part 40, 60.44b(a) when firing residual oil, which has a high heat release rate.*

4. Visible Emissions from the gas- and oil-fired boiler (emission unit ID#: B1, BO 0501) stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed **27 percent opacity**. This condition applies at all times except during start-up, shutdown, or malfunction.

(9 VAC 5-50-80, 9 VAC 5-80-110, NSPS D_b, and Condition 16 of 12/11/95 Permit)

- *The 27 percent opacity is part of the required particulate standard as per NSPS D_b, Part 40, Part 60.43b(f).*

B. Monitoring and Recordkeeping:

1. A continuous emission monitoring system (CEMS) consisting of a **NO_x monitor** and a suitable diluent monitor (either CO₂ or O₂), shall be installed on the gas- and oil-fired boiler (emission unit ID#: B1, BO 0501). Data from the NO_x CEMS shall be used to determine compliance with the emission standard (in lbs/MMBtu) on a 30-day rolling average as specified in Conditions III.A.8, 9, 10, and 11. The NO_x monitor shall be maintained, located and calibrated in accordance with approved procedures (ref. 40 CFR 60.13, 40 CFR 60 Subpart D_b, and 40 CFR 60, Appendix F).
(9 VAC 5-80-110, NSPS D_b, and Condition 21 of 12/11/95 Permit)
 - *Periodic Monitoring for NO_x emission limits.*
2. A continuous emission monitor shall be installed on the gas- and oil-fired boiler (emission unit ID#: B1, BO 0501) stack to measure and record **opacity** when the boiler (emission unit ID#: B1, BO 0501) is burning fuel oil.
(9 VAC 5-80-110, NSPS D_b and Condition 22 of 12/11/95 Permit)
 - *Periodic Monitoring for Opacity standard as required for NSPS D_b*
3. The continuous monitoring data generated by the NO_x and opacity monitors (emission unit ID#: B1, BO 0501) may, at the discretion of the Board, be used as evidence of violation of the emission and/or opacity standards. These data shall be kept on file and made available to the Department upon request.
(9 VAC 5-80-110 and Condition 24 of 12/11/95 Permit)
4. An annual inspection shall be conducted on the multicyclone for the gas and oil-fired boiler (emission unit ID#: B1, BO 0501) by the permittee to ensure structural integrity.
(9 VAC 5-80-110 and Condition 5 of 12/11/95 Permit)
 - *Periodic Monitoring to ensure the required multicyclones are operating properly*
5. The permittee shall maintain records of the required **training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler (emission unit ID#: B1, BO 0501).** These procedures shall be based on the manufacturer's recommendations, at minimum. **All records required by this condition shall be kept on site and made available for inspection by the DEQ.**
(9 VAC 5-80-110 and Condition 28 of 12/11/95 Permit)

- *Periodic Monitoring to ensure boilers are operating properly to reduce emissions.*
- 6. The permittee shall maintain records of all emission data and operating parameters for the gas-and oil-fired boiler (emission unit ID#: B1, BO 0501) necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. The monthly throughput of natural and LP gas and the monthly throughput of distillate and/or residual oil for the gas-and oil-fired boiler. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
- *To demonstrate compliance with the annual emission limitations.*
 - b. The annual emissions of sulfur dioxides, nitrogen oxides, carbon monoxide and particulate calculated as the sum of each consecutive 12 month period
- *To demonstrate compliance with the annual emission limitations.*
 - c. All fuel supplier certifications.
- *To demonstrate compliance with the proper fuel being used and sulfur content and to demonstrate compliance with sulfur dioxide emission limits.*
 - d. CEM records
- *To demonstrate emission limits are not exceeded.*
 - e. Opacity and NO_x monitor quarterly and semiannual excess emission reports.
 - f. Records of all malfunctions of equipment which would cause a violation of any part of this permit.
 - g. Operating procedures, maintenance schedules, and service records for all air pollution-related equipment.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, and condition 30 of 12/11/95 Permit)

C. Reporting

1. The permittee shall submit excess **NO_x and opacity emission reports** (emission unit ID#: B1, BO 0501) to the Director, Piedmont Regional Office within 30 days after the end of

each calendar quarter for which there are excess emissions as described in 40 CFR 60.49b (h) and (i). Details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office, postmarked by the 30th day of the third month following the completion of the initial performance test, unless no excess emissions occur during that quarter. The initial semiannual report shall be postmarked by the 30th day of the sixth month following the completion of the initial performance test, or following the date of the previous quarterly report, as applicable. Each subsequent quarterly or semiannual report shall be postmarked by the 30th day following the end of the reporting period. **All quarterly and semiannual monitoring reports** shall conform to the Continuous Emission Monitoring System Report Format **enclosed with the permit dated 12/11/95** or other Format as approved by DEQ. (9 VAC 5-80-110, NSPS D_b, and condition 25 of 12/11/95 Permit)

- The underlined section listed above was placed in this condition at Philip Morris's request. This could be included as this is a clarification.

2. The permittee shall submit **fuel quality reports** (emission unit ID#: B1, BO 0501) to the Director, Piedmont Regional Office within 30 days after the end of each calendar quarter. If no shipments of distillate or residual oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate or residual oil was received during the calendar quarter, the reports shall include:
 - a. The dates included in the calendar quarter;
 - b. A copy of all fuel supplier certifications for all shipments of distillate and/or residual oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition III.A. 15. for each shipment of distillate and residual oil; and,
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-50-50, 9 VAC 5-80-110, and condition 31 of 12/11/95 Permit)

D. Testing

12/11/95 Permit

1. **The NO_x CEMS** (emission unit ID#: B1, BO 0501) **shall be performance-tested in accordance with 40 CFR 60, Appendix F.** A 30-day notification prior to the demonstration of continuous monitoring system performance, and subsequent notification

requirements, are to be submitted to the Department (Director, Piedmont Regional Office).
(9 VAC 5-80-110, NSPS D_b, and Condition 21 of 12/11/95 Permit)

2. **The opacity monitor** (emission unit ID#: B1, BO 0501) **shall be performance-tested in accordance with 40 CFR 60, Appendix B.** A thirty (30) day notification prior to the demonstration of continuous monitoring system's performance, and subsequent notifications, shall be submitted to the Director, Piedmont Regional Office.
(9 VAC 5-80-110, NSPS D_b and Condition 22 of 12/11/95 Permit)

- The above conditions were not included into the Title V permit as this condition (or section of the condition) is an initial performance test and no subsequent performance tests will be required and therefore would be considered an obsolete condition.

II. EMISSION UNIT APPLICABLE REQUIREMENTS

Fuel Burning Equipment Requirements – (emission unit ID#B2, BO 0201)

A. Limitations

1. The SO₂ Emissions from the operation of the boiler (emission unit ID#: B1, BO 0501) shall not exceed the limitations specified below:

- a. Sulfur Dioxide

Limit when Burning Coal*	2.1 lbs/MMBtu
Limit when Burning Oil*	2.51 lbs/MMBtu

*The limit when burning a mixture of coal and oil shall be determined using the following formula:

$$E(\text{SO}_2) = [2.51 (x) + 2.1 (y)]/100$$

Where x = % heat input from oil
Where y = % heat input from coal

- b. The sulfur content of the coal burned on an annual average shall not exceed 1.2 percent.
The sulfur content of the coal as supplied to the boiler (emission unit ID#: B1, BO 0201) shall at no time exceed 1.4 percent.

(9 VAC 5-80-110, and Condition 12 of 12/5/77 as amended on 6/26/81)

- The sulfur emission limit and sulfur content of the coal were based on the Federal Standard of NSPS D. The boiler (emission unit ID#: B2, BO 0201) is not subject to NSPS D; however, the standards from this federal standard were presumed to be used as BACT for this boiler (emission unit ID#: B2, BO 0201).

2. Particulate emissions from the coal-oil boiler (emission unit ID#: B1, BO 0201) shall be limited to 0.1 lb/MMBtu heat input.
(9 VAC 5-80-110, and Condition 10 of 12/5/77 permit.)

3. Nitrogen oxides emissions from the boiler (emission unit ID#: B1, BO 0201) shall be limited to 0.70 lb/MMBtu heat input.
(9 VAC 5-80-110, and Condition 11 of 12/5/77 permit.)

- From review of the associated engineering evaluation dated September 15, 1977, the write up stated the following in regards to nitrogen oxides emissions:

“The boiler will be capable of firing either 100% coal or 100% oil. Under these conditions NOx emission limitations will range from 0.7 to 0.3 #/10⁶ BTU input...”

The above two conditions (10 and 11 of the 12/5/77 permit) were based on the Federal Standard of NSPS D. The boiler (emission unit ID#: B2, BO 0201) is not subject to NSPS D; however, the standards from this federal standard were presumed to be used as BACT for this boiler (emission unit ID#: B2, BO 0201).

4. Visible emissions from the boiler (emission unit ID# B2, BO 0201) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)

- The above New Source Standard for Visible Emissions (9 VAC 5-50-80 and 290) was added to the Title V permit as this is an applicable specific emission requirement of the State Regulations which has to be met unless there is an opacity limitation already in place in an existing NSR permit which is more stringent or equal to the standard. The existing NSR permit did not have such a limitation.

B. Monitoring and Recordkeeping:

1. A continuous monitoring system **for measuring and recording the nitrogen oxides emissions from the boiler** stack shall be installed, calibrated, maintained and operated by the owner or operator unless it is demonstrated during performance tests that the emissions of nitrogen oxides is 30 percent or more below the allowable of 0.70 lb/MMBtu heat input (less than 0.43 lbs/MMBtu heat input).
(9 VAC 5-80-110, and Condition 7 of 12/5/77 permit.)

- The above condition is considered obsolete as it tested at less than 0.43 lbs/MMBtu heat input (as per NSPS D – 40 CFR 60.45(b)(3)) and as per the following letters from the Department to Philip Morris:

August 1, 1979

“We have reviewed the particulate and NO_x emission test results submitted in your letter dated June 20, 1979 and amendments dated July 31, 1979.

The tests have shown that the new boiler complies with the particulate and NO_x emission limits set in conditions 10 & 11 of the approval letter dated December 5, 1977.

This letter constitutes the final action by the SAPCB regarding the permit for this new boiler.”

August 3, 1979

Referring to our August 1, 1979 letter concerning the tests done on the new boiler we wish to state that the instrument to monitor NO_x emissions for this boiler will not be required since the test showed that NO_x emissions averaged less than 0.49 #/10⁶ BTU input (30% below the standard of 0.7 #/10⁶ BTU).

This exemption is spelled out in condition 7 of the approval letter dated December 5, 1977.”

****: The following monitoring conditions which have an asterisk beside them is monitoring which was added later for the 12/5/77 permit requirements and any additional applicable requirements for equipment covered under this permit.***

2. Operation of the ESP (emission unit ID#B2, BO 0201) shall be monitored as according to the manufacturer's recommended procedures along with the use of the opacity monitoring system.*
(9 VAC 5-80-110)

From review of the associated engineering evaluation dated September 15, 1977 for

the December 5, 1977 permit for the coal fired boiler (emission unit ID#: B1, BO 0201), the write up stated the following in regards to particulate emissions:

“Particulate emissions will be controlled by an electrostatic precipitator designed at 99.62% collection efficiency. This will be adequate to meet the 0.1#/10⁶ input particulate emission limitation.”

In addition, an opacity monitor is required as per condition no. 6 (as follows) of the December 5, 1977 permit and as required in condition no. IV.B.2. of the Title V permit which will be used for periodic monitoring of the 0.1 lb/MMbtu emission limit.

3. A continuous monitoring system **for measuring and recording the opacity of the boiler** (emission unit ID#B2, BO 0201) stack emissions shall be installed, calibrated, maintained and operated by the owner or operator. The opacity monitoring system (emission unit ID#B2, BO 0201) shall meet a minimum data availability of 90 percent of boiler operating hours on a 12-month rolling average.
(9 VAC 5-80-110, and Condition 6 of 12/5/77 permit.)
4. **The NO_x limitation of 0.70 lb/MMBtu shall be monitored by conducting a** performance test for NO_x from the boiler (emission unit ID#B2, BO 0201) to determine compliance with the emission limit contained in Condition IV.A.5. The test shall be performed, and reported within five years after permit issuance but in no event later than the permit expiration date. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Region within 60 days after test completion.*
(9 VAC 5-80-110)

**: A performance test for NO_x was required for periodic monitoring as a CEM was not required for this boiler to demonstrate compliance with the NO_x emission limit of 0.7 lbs/MMbtu.*

5. A continuous monitoring system **for measuring and recording the sulfur dioxide emissions from the boiler** (emission unit ID#B2, BO 0201) stack shall be installed, calibrated, maintained and operated by the owner or operator. The sulfur dioxide emissions monitoring system shall meet a minimum data availability of 90 percent of boiler operating hours on a 12-month rolling average.
(9 VAC 5-80-110, and Condition 8 of 12/5/77 permit.)

The continuous monitoring systems for monitoring opacity and sulfur dioxide were required as per the former State Air Pollution Control Board Regulations, Section 5.04(a)(1). The SO₂ emissions monitor was required to demonstrate compliance with the SO₂ emission limit based on NSPS D being used presumably as BACT.

6. The continuous emission monitoring systems for measuring opacity and sulfur dioxide emissions from the boiler (emission unit ID#B2, BO 0201) stack shall self calibrate every 24-hours using known standards.*
(9 VAC 5-80-110)

**: This was required to ensure the opacity monitor and sulfur dioxide emissions monitor were operating correctly. This was not required of the monitors for (emission unit ID #: B3, BO 0301) as EPA's monitoring requirements under 40 CFR 60 were cited in condition 6 of the 8/23/04 permit and as required under V.B.1.*

7. The permittee shall obtain a certification from the fuel supplier with each shipment of coal and/or oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the coal and/or oil was received,
 - c. The mass (i.e. tons) of coal and the volume of oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and/or for residual oil.
 - e. The sulfur content of the oil.
 - f. The % sulfur and % ash content of the coal along with the Btu content per shipment.
(9 VAC 5-50-410 and 9 VAC 5-80-110)*

**: The required sulfur content of the coal as per NSPS D of which presumably was for BACT purposes would be demonstrated by a fuel supplier certification for periodic monitoring.*

8. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Opacity measurements and sulfur dioxide emission measurements from the continuous monitoring systems associated with condition IV.B.2 and 4.
 - b. All self calibration records of the continuous monitoring systems as required by condition IV.B.6.
 - c. NO_x Stack Test Result as required by condition IV.B.3.
 - d. All monitoring performed for the ESP (emission unit ID#B2, BO 0201) as per the manufacturer's recommended procedures).
 - e. All fuel supplier certifications.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

III. EMISSION UNIT APPLICABLE REQUIREMENTS

Fuel Burning Equipment Requirements – (emission unit ID# B3, BO 0301)

A. Limitations

1. **Emission Controls** – Particulate emissions from the boiler (emission unit ID#: B3 BO 0301) shall be controlled by an electrostatic precipitator designed at 99.6 percent control efficiency.
(9 VAC 5-80-110 and Condition 3 of 8/23/04 Permit)
2. Emissions from the operation of the boiler (emission unit ID #: B3, BO 0301, AS1 – AS2) shall not exceed the limitations specified below:

Particulate Matter	0.1	lbs/MMBtu	23.7	lbs/hr
Nitrogen Oxides (as NO ₂)	0.7	lbs/MMBtu	165.9	lbs/hr

Visible Emissions 20% opacity

Sulfur Dioxide

Limit when Burning Coal*	2.1	lbs/MMBtu	491.2	lbs/hr
Limit when Burning Oil*	2.51	lbs/MMBtu	595.3	lbs/hr

* The limit when burning a mixture of coal and oil shall be determined using the following formula:

$$E(\text{SO}_2) = [2.51 (x) + 2.1 (y)]/100$$

Where x = % heat input from oil

Where y = % heat input from coal

(9 VAC 5-80-110, and Condition 10 of 8/23/04 Permit)

The above particulate matter emissions limitation of 0.1 lbs/mmbtu is the same as 40 CFR 60.42(a)(1) of which was used to base the limit. In addition, the same basis was used for the nitrogen oxides limitation of 0.7 lbs/mmbtu which is for solid fossil fuel as listed under 40 CFR 60.44(a)(3).

Last of all, the above formula appears to be an adaptation of the formula currently under (NSPS D) 40 CFR 60.43(b) for when burning different fossil fuels simultaneously.

This is all based on the following from the engineering analysis dated September 18, 1980 for the prior December 9, 1980 permit:

“This new boiler rated at the same capacity as the second unit will be designed to meet NSPS for fossil-fuel fired steam generators except for SO₂. Particulate emissions will be controlled by an electrostatic precipitator designed at 99.6% collection efficiency, more than enough to meet the 0.1 #/10⁶ BTU input particulate emission standard.

Nitrogen oxides emissions will be minimized to meet the 0.7 #/10⁶ BTU input through boiler furnace design and combustion operation techniques that is considered at this time to be most effective control method available so far.

SO₂ emissions will be controlled thru fuel sulfur content that the source may burn.”

“BACT – The new boiler will have an electrostatic precipitator for particulate control which is BACT for the pollutant. SO₂ emissions will be limited by sulfur content of the fuel to be used in the boiler. NO_x emissions will be controlled by furnace design and combustion modification. The new boiler will utilize best available control in its design.”

“NSPS – Particulate & NO_x emissions will meet NSPS for fossil-fuel fired steam generator. SO₂ standard will be better than for existing source.

3. The annual average sulfur content of the coal burned shall not exceed 1.2 percent. The sulfur content of the coal as supplied to the boiler (emission unit ID #: B3, BO 0301, AS1 – AS2) shall at no time exceed 1.4 percent.
(9 VAC 5-80-110 and Condition 9 of 8/23/04 permit.)

The 1.2 percent average sulfur content seems to be based on information from AP-42 from review of the files and from what was stated in the permit application. The following was stated in the September 18, 1980 permit engineering analysis for the prior December 9, 1980 permit:

“Low sulfur coal (1.2% maximum) and 2.4% sulfur no. 6 oil is proposed to limit SO₂ emissions.”

BACT – “SO₂ emissions will be limited by sulfur content of the fuel to be used in the boiler.”

B. Monitoring and Recordkeeping:

The preceding 1984 permit for the August 23, 2004 permit consolidated the most stringent conditions from the December 9, 1980 permit, amended June 26, 1981 and the PSD permit issued by EPA on May 20, 1981.

Condition Part I.4 of 4/2/84 Permit – It was presumed the CEM was BACT which was mirrored after D as D is for 250 mmbtu/hr boilers; however, this one is 237 mmbtu/hr. It therefore is not subject to D as it was constructed in 1982 which was before the applicability date of June 19, 1984.

Boiler:

1. Park 500 shall install and operate **continuous emission monitoring systems (emission unit ID #: B3, BO 0301) for measuring opacity, sulfur dioxide, and nitrogen oxide**. Park 500 shall install and operate these monitoring systems in accordance with the EPA requirements specified in 40 CFR Section 60.13 and Section 60.45 **The opacity and sulfur dioxide emission monitoring systems shall meet a minimum data availability of 90 percent of boiler operating hours on a 12-month rolling average.**
(9 VAC 5-80-110 and Condition 6 of 8/23/04 Permit)

The above section of the condition which discusses the 90% data availability in bold was added at the request of Philip Morris. This could be added as this was clarification of the periodic monitoring condition.

In order for the CEM to be used for compliance they are monitored in accordance with EPA's methods as a result no additional requirement was placed in the permit for this purpose.

Philip Morris demonstrates compliance with their % sulfur content limitation by fuel supplier certifications.

2. The permittee shall obtain a certification from the fuel supplier with each shipment of coal and/or oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the coal and/or oil was received,
 - c. The mass (i.e. tons) of coal and the volume of oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and/or for residual oil.
 - e. The sulfur content of the oil.
 - f. The % sulfur and % ash content of the coal along with the Btu content per shipment.

(9 VAC 5-50-410 and 9 VAC 5-80-110)*

**: Periodic Monitoring to demonstrate compliance with the sulfur content in the fuel.*

3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such

records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. The annual throughput of oil (in gallons) for the boiler (emission unit ID#: B3, BO 0301). The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
- b. Opacity measurements and sulfur dioxide emission measurements from the continuous monitoring systems associated with condition V.B.1.
- c. All calibration records of the continuous monitoring systems (emission unit ID#: B3, BO 0301) associated with condition V.B.1.
- d. NO_x Stack Test Results as required by condition V.B.2.
- e. All fuel supplier certifications.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

4. The NO_x limitation of 0.70 lb/MMBtu shall be monitored by conducting a performance test for NO_x from the boiler (emission unit ID#B3, BO 0301) to determine compliance with the emission limit contained in condition V.A.7. The test shall be performed, and reported within five years after permit issuance but in no event later than the permit expiration date. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Region within 60 days after test completion. (9 VAC 5-80-110)*

**: A performance test for NO_x was required for periodic monitoring as a CEM was not required for this boiler to demonstrate compliance with the NO_x emission limit of 0.7 lbs/MMbtu.*

C. Reporting

1. Park 500 shall submit a written report listing the excess emissions recorded by its continuous monitors to the Director, Piedmont Regional Office every calendar quarter. Periods of excess emissions are defined as follows:

- a. Any six-minute period during which the average opacity of emission exceeds 20 percent.
- b. Any three-hour period during which the average emissions of sulfur dioxide (computed by taking the arithmetic average of any three contiguous one-hour periods) exceeds 2.51 lbs. per MMBtu.

All quarterly reports must include the information specified in 40 CFR Section 60.7(c). The reports shall be postmarked by the 30th day of the month following the end of the quarter. (9 VAC 5-80-110 and condition no. 12 of 8/23/04 Permit)

IV. EMISSION UNIT APPLICABLE REQUIREMENTS

Coal Handling and Storage Equipment (coal car shakers, coal crushers, various conveyors and silos), Ash Handling and Storage Equipment (cyclones, silos, and conveying systems), and Fly Ash Handling System (subset of Ash Handling Equipment) Requirements: (emission unit ID#s: CH0101, AH0101, and AH0101 stack ID# AE-43)

A. Limitations

1. **Emission Controls** – The fugitive coal dust emissions from the coal handling system (emission unit ID #: CH0101) shall be controlled by a wet spray dust suppression system rated at 90 percent control efficiency.
(9 VAC 5-80-110 and Condition 4 of 8/23/04 Permit)

- Also, in regards to the coal handling the following was stated in the September 18, 1980 engineering analysis:

“Coal handling is one source of fugitive dust emissions. Quantification of the emission from this source is not possible. However, the owner will install a Wet-Spray dust suppression system which will be designed to have a 90% collection efficiency.”

2. **Emission Controls** – Particulate emissions from the ash handling system (emission unit ID#: AH0101) shall be controlled by the following:

- a. Primary Cyclone
- b. Secondary Cyclone
- c. Baghouse

These collectors are to be installed in series. Overall Efficiency will be 98 percent or better.
(9 VAC 5-80-110 and Condition 5 of 8/23/04 Permit)

3. Particulate emissions from the fly ash handling system (emission unit ID#: AH0101, Stack ID#: AE-43) shall not exceed 0.02 lbs/hr or 0.08 tons per year. The visible emissions from the fly ash handling system (emission unit ID#: AH0101, Stack ID#: AE-43) shall not exceed 10 percent.

(9 VAC 5-80-110 and Condition 10 of 8/23/04 Permit)

- *It was concluded the 10 percent opacity limit for the fly ash handling system was due to this being considered as BACT.*

4. Except as specified in condition VI.A.3, visible emissions from the coal handling and storage equipment (coal car shakers, coal crushers, various conveyors and coal silos) and ash handling and storage equipment (cyclones, silos, and conveying systems) (emission unit ID# CH0101 and AH0101) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-50-80 and 9 VAC 5-80-110)

- *The above New and Modified Source Standard for Visible Emissions (9 VAC 5-50-80 and 290) was added to the Title V permit as this is an applicable specific emission requirement of the State Regulations which has to be met unless there is an opacity limitation already in place in an existing NSR permit which is more stringent or equal to the standard. The existing NSR permit did not have such a limitation.*

Also this facility is subject to NSPS Y – Standards of Performance for Coal Preparation Plants which has a standard for particulate matter which states the following:

40 CFR 60.252 (c):

On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart

shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

*However, a facility wide condition was put in place to address NSPS Y – **Standards of Performance for Coal Preparation Plants which has a standard for particulate matter which states the following:***

“Except where this permit is more restrictive than the applicable requirement, all applicable NSPS Subpart Y equipment shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.

(9 VAC 5-60-90, 9 VAC 5-60-100 and 9 VAC 5-80-110)”

B. Monitoring and Recordkeeping

Ash Handling System:

1. The emissions from the fly ash handling system (emission unit ID #: AH0101 - stack ID#: AE-43)) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on each emissions unit/source. Each emissions unit/source observed having any visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.
(9 VAC 5-170-160, 9 VAC 5-80-110 E. and F.)
- *To demonstrate compliance with the 10 % visible emission requirement for the fly ash handling system along with the particulate emission limit.*
2. If any visible emissions evaluations as required by condition V.B.4. demonstrate visible emissions from the fabric filter (emission unit ID #: AH0101- stack ID#: AE-43) exceeding 5%, a differential pressure gauge shall be installed to continuously measure the differential pressure drop across the fabric filter. The differential pressure gauge shall be maintained in proper working order at all times by the permittee and the differential pressure shall be checked and recorded once a month during operation. If the pressure is outside of the manufacturer’s recommendations, actions will be taken to determine the cause and records shall be kept to indicate what corrective actions were taken, if need be.
(9 VAC 5-80-110)

3. An annual inspection shall be conducted on the cyclones (emission unit ID #: AH0101) by the permittee to ensure structural integrity. Results of the inspection shall be kept and made available to the Department upon request. If any corrective actions were taken, records will be kept to indicate what corrective actions were taken and made available to the Department upon request.
(9 VAC 5-80-110)
4. Except as specified in condition VI.B.1., the emissions from the coal handling and storage equipment (coal car shakers, coal crushers, various conveyors and coal silos) and ash handling and storage equipment (cyclones, silos, and conveying systems) (emission unit ID #: CH0101 and AH0101(excluding stack ID#: AE-43)) shall be observed visually at least each calendar month for at least a brief time period during normal operations to determine if there are normal visible emissions from each (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on each emissions unit/source. Each emissions unit/source observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.
(9 VAC 5-170-160, 9 VAC 5-80-110 E. and F.)
 - *Periodic monitoring to demonstrate compliance with the New and Modified Source Standard for Visible Emissions (9 VAC 5-50-80 and 290) and to demonstrate compliance with the 90% control efficiency of the wet spray dust suppression in the August 23, 2004 permit (preceding PSD permit was dated 4/2/84). Also, this facility is subject to NSPS Y – Standards of Performance for Coal Preparation Plants which has a standard for particulate matter of 20% opacity.*
5. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. All visual emissions observations or 40 CFR 60, Appendix A. Method 9 visual evaluations as required in conditions VI.B.1 and 4.

- b. Results of monitoring of air pollution control equipment, visual emission observations or evaluations of the coal handling and storage equipment (coal car shakers, coal crushers, various conveyors and coal silos) and ash handling and storage equipment (cyclones, silos, and conveying systems) (emission unit ID#s: CH0101 and AH0101).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110)

V. EMISSION UNIT APPLICABLE REQUIREMENTS

Combustion Equipment (Generators) Requirements – (emission unit ID# W1, EG0101, and W2, EG0101) and Receiving and Blending Area – (emission unit ID#s: DC0401 to DC0408, BW0401 to BW0408, DC0301 to DC0306 and DC0207, BW0301 to BW0307, HM0201 to HM0204 and HM0101 and BC0301)

A. Monitoring and Recordkeeping:

1. The emissions from the generators (emission unit ID#: W1, EG0101, and W2, EG0101) and Receiving and Blending Area (emission unit ID #s: DC0401 to DC0408, BW0401 to BW0408, DC0301 to DC0306 and DC0207, BW0301 to BW0307, HM0201 to HM0204 and HM0101 and BC0301) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are normal visible emissions from each (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on each emissions unit/source. Each emissions unit/source observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

(9 VAC 5-170-160, 9 VAC 5-80-110 E. and F.)

- Periodic monitoring to demonstrate compliance with the visible emission limitation in the permit.

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall

include, but are not limited to:

- a. The total yearly throughput of diesel fuel for the generators (emission unit ID #: W1, EG0101, and W2, EG0101), calculated as the sum of each consecutive 12 month period.
- b. The yearly throughput of tobacco process P5BB (emission unit ID #: DC0401 to DC0408, BW0401 to BW0408, DC0301 to DC0306 and DC0207, BW0301 to BW0307, HM0201 to HM0204 and HM0101 and BC0301), calculated as the sum of each consecutive 12 month period.
 - “a. & b.” periodic monitoring to demonstrate compliance with the annual emission limitations.
- c. Diesel fuel shipments purchased, indicating the sulfur content per shipment.
 - *Periodic monitoring to demonstrate compliance with the sulfur content requirement.*
- d. Results of visual emissions observations or 40 CFR 60, Appendix A Method 9 visible emission evaluation as required in condition VII.B.2.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, and condition 12 of 8/18/04 Permit)

VI. EMISSION UNIT APPLICABLE REQUIREMENTS:

Pulping (pneumatic transfer) (emission unit ID#: L1CY0101, L1CY0102, L2CY0101 and L2CY0102), Tobacco Drying Requirements– (emission unit ID# L1 DD0101, L1 DT0101, L1 DR0101, L2DD0101, L2DT0101, and L2DR0101) and Packing Requirements – (emission unit ID# L1 PP0101 & L1PP0102 and L1 PP0201 & L1PP0202)
(Permitted under 7/9/74 Permit)

A. Limitations

1. Visible emissions from the Pulping (pneumatic transfer) (emission unit ID#: L1CY0101,

L1CY0102, L2CY0101 and L2CY0102), Tobacco Drying – (emission unit ID# L1 DD0101, L1 DT0101, L1 DR0101, L2DD0101, L2DT0101, and L2DR0101) and Packing – (emission unit ID# L1 PP0101 & PP0102 and L1 PP0201 & PP0202) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-50-80 and 9 VAC 5-80-110)

- *The above New Source Standard for Visible Emissions (9 VAC 5-50-80 and 290) was added to the Title V permit as this is an applicable specific emission requirement of the State Regulations which has to be met unless there is an opacity limitation already in place in an existing NSR permit which is more stringent or equal to the standard.*

B. Monitoring and Recordkeeping:

1. The emissions from the Pulping (pneumatic transfer) (emission unit ID#: L1CY0101, L1CY0102, L2CY0101 and L2CY0102), Tobacco Drying – (emission unit ID# L1 DD0101, L1 DT0101, L1 DR0101, L2DD0101, L2DT0101, and L2DR0101) and Packing – (emission unit ID# L1 PP0101 & PP0102 and L1 PP0201 & PP0202) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are normal visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit Pulping (pneumatic transfer) (emission unit ID#: L1CY0101, L1CY0102, L2CY0101 and L2CY0102), Tobacco Drying – (emission unit ID# L1 DD0101, L1 DT0101, L1 DR0101, L2DD0101, L2DT0101, and L2DR0101) and Packing – (emission unit ID# L1 PP0101 & PP0102 and L1 PP0201 & PP0202) observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

(9 VAC 5-170-160, 9 VAC 5-80-110 E. and F. of State Regulations)

- *Periodic monitoring to demonstrate compliance with the opacity standard for new and modified sources.*
2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. Results of visual emissions observations or 40 CFR 60, Appendix A Method 9 visible emission evaluations as required in condition VIII.B.1.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

VII. EMISSION UNIT APPLICABLE REQUIREMENTS

Tobacco Drying and Packing and Process Ventilation Process Equipment Requirements – (emission unit ID# L3 DD0101, L3 DT0101, L3 DR0101, and L3 PP0101, PP0102, & PP0103)

A. Limitations:

The following Virginia Administrative Code (9 VAC 5-50-80 and 290, *New Source Standard for Visible Emissions*) which has specific emission requirements has been determined to be applicable and therefore was included in the Title V permit as follows:

1. Visible emissions from the tobacco process line (emission unit ID# L3 DD0101, L3 DT0101, L3 DR0101, and L3 PP0101, PP0102, PP0103) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)

B. Monitoring and Recordkeeping:

1. The fabric filter (emission unit ID# L3 PP0101, PP0102, and PP0103) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110)

- Periodic monitoring to demonstrate the fabric filters are operating properly to control the emissions.
2. The emissions from the tobacco process line (emission unit ID# L3 DD0101, L3 DT0101,

L3 DR0101, and L3 PP0101, PP0102, PP0103) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are normal visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit (emission unit ID# L3 DD0101, L3 DT0101, L3 DR0101, and L3 PP0101, PP0102, PP0103) observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

(9 VAC 5-170-160, 9 VAC 5-80-110 E. and F. of State Regulations)

3. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

- a. Annual production through tobacco process line (emission unit ID# L3 DD0101, L3 DT0101, L3 DR0101, and L3 PP0101, PP0102, PP0103) P5PB units, calculated monthly as the sum of each consecutive twelve (12) month period.

- Periodic Monitoring to demonstrate compliance with the annual emission limits.

- b. Results of visual emission observations or 40 CFR 60, Appendix A Method 9 visible emission evaluation as required in condition IX.B.2.

- Periodic monitoring to demonstrate compliance with the opacity standard for new and modified sources.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110 and condition 7 of 6/30/04 permit)

VIII. EMISSION UNIT APPLICABLE REQUIREMENTS

Dry Tobacco Flavoring Operation Process Equipment which includes the Blending and Holding Tanks Requirements – (emission unit ID# L3, TK4501, L3 MT0801), Dry Tobacco Flavoring Dump Station (emission

unit ID#: L3 TK4601) and two propylene glycol storage tanks (emission unit ID#: TK4901 & TK4902)

A. Limitations

1. Visible emissions from the fabric filter (for the dry tobacco flavoring dump station) (emission unit ID #: L3 TK4601)) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition 8 of 8/19/04 Permit)
- 5% opacity was BACT.

B. Monitoring and Recordkeeping:

1. The fabric filter for the dry tobacco flavoring dump station (emission unit ID #: L3 4601) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 3 of 8/19/04 Permit)
2. The emissions from the dry tobacco flavoring dump station's (emission unit ID #: L3 TK4601) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having any visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.
(9 VAC 5-170-160, 9 VAC 5-80-110 E. and F. of State Regulations)

- Periodic monitoring to demonstrate the dump station is meeting the 5% visible emission limit.
3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

- a. The yearly throughput of propylene glycol (emission unit ID#: TK4901 & TK4902), calculated as the sum of each consecutive twelve (12) month period.
- b. The annual consumption of dry flavor ingredient (emission unit ID#: L3 TK4601), calculated as the sum of each consecutive twelve (12) month period.
- *“a. & b.” Periodic monitoring to demonstrate compliance with the annual emission limits.*
- c. Results of visual emissions observation or 40 CFR 60, Appendix A Method 9 visible emission evaluations as required in condition X.B.2.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, and Condition 9 of 8/19/04 Permit)

IX. EMISSION UNIT APPLICABLE REQUIREMENTS

Limitations which are applicable to most of the current permits as listed as follows:

Approved Fuels Conditions is a general requirement to ensure the source is in compliance with emission limits and to ensure the facility doesn't combust a dirtier fuel. The following conditions which address approved fuels conditions are as listed below:

Condition III.A.5 (condition 7 of 12/11/95 Permit), condition IV.A.2 (from 12/5/77 permit), condition V.A.2 (condition 7 of 8/23/04 permit), and condition VI.A.1 (condition 4 of 8/18/04 permit).

Types of Control Equipment Conditions which are required is based on BACT. The conditions which address this is listed below:

Condition III.A.1 (condition 3 of 12/11/95 permit), conditions III.A.2 and 3 (4 & 5 12/11/95 permit), condition IV.A.1 (12/5/77 permit), condition V.A.1 (Conditions 3, 4 and 5 8/23/04 permit), condition VII.A.1 (condition 3 of 8/18/04 permit), condition IX.A.1 (condition 3 of 8/19/04 permit), condition X.A.1 (Condition 3 6/30/04 permit)

The throughput or production limitations are based on BACT requirements. In addition, the throughput or production limitations ensures that the annual emissions limits are being met which would be considered a practical enforceable condition. The conditions

which address throughput or production limitations are listed below:

Condition III.A.6 (condition 9 of 12/11/95 permit), condition V.A.4 (condition 8. of 8/23/04 permit), condition VI.A.3 (condition 7 of 8/18/04-permit), condition VII.A.2 (condition 6 of 8/18/04 permit), condition IX.A.2 (condition 5 of 8/19/04 permit), condition IX.A.3 (condition 6 of 8/19/04 permit), condition X.A.2 (condition 4 of 6/30/04 permit)

Emission Limitations Conditions are based on BACT. The following conditions which contain emission limitations are listed below:

Fuel Burning Equipment:

Condition III.A.8 (Condition 11 of 12/11/95 permit), condition III.A.9 (condition 12 of 12/11/95 permit), condition III.A.10 (condition 13 of 12/11/95 permit), condition III.A.11 (condition 14 of 12/11/95 permit), condition III.A.12 (condition 15 of 12/11/95 permit – annual emissions), Conditions V.A.5 and 3, 4, and 5 (Condition 10 of 8/23/04 permit and conditions 12, 10, and 11 of 12/5/77 permit), and condition VI.A.4 (condition 9 of 8/18/04 permit).

Process Equipment:

Condition VII.A.4 (condition 10 of 8/18/04 permit), condition IX.A.5 (condition 7 of 8/19/04 permit), condition X.A.3 (condition 5 and 6 of 6/30/04 permit).

Streamlined Requirements

1. The sulfur content of the diesel fuel to be burned in the generators shall not exceed 0.5 percent by weight per shipment. **The permittee shall maintain records (supplier fuel analysis) of all diesel fuel shipment. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five years.**
(9 VAC 5-80-110and Condition 8 of 8/18/04 permit.)

The section of the above condition which is **bolded** and ~~struck through~~ has been streamlined with the existing condition **bolded below** which has the same required records along with the same retention time period.

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. The total yearly throughput of diesel fuel for the generators (emission unit ID #: W1, EG0101, and W2, EG0101), calculated as the sum of each consecutive 12 month period.
 - b. The yearly throughput of tobacco process P5BB (emission unit ID #: DC0401 to DC0408, BW0401 to BW0408, DC0301 to DC0306 and DC0207, BW0301 to BW0307, HM0201 to HM0204 and HM0101 and BC0301), calculated as the sum of each consecutive 12 month period.
 - c. **Diesel fuel shipments purchased, indicating the sulfur content per shipment.**
 - d. Results of visual emissions observations or 40 CFR 60, Appendix A Method 9 visible emission evaluation of the generators and receiving and blending area (emission unit ID #: DC0401 to DC0408, BW0401 to BW0408, DC0301 to DC0306 and DC0207, BW0301 to BW0307, HM0201 to HM0204 and HM0101 and BC0301).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, and condition 12 of 8/18/04 Permit)

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE ONLY APPLICABLE REQUIREMENTS - NA

FUTURE APPLICABLE REQUIREMENTS

The source is not subject to CAM during this issuance as the application was submitted before the February 20, 1998 deadline; however, it will be subject to CAM upon renewal of the Title V permit.

The National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters MACT DDDDD is applicable to this source. However, the compliance date for this MACT will not be until year 2007.

INAPPLICABLE REQUIREMENTS – National Emissions Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE MACT ZZZZ) - The affected diesel generators are compression ignition (CI) units, they are exempt from all rule requirements and all requirements under the General Provisions of Part 63, subpart A

COMPLIANCE PLAN - NA

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
Storage Tanks				
B1				
TK1001	Emerg. Gen Day Tank	9 VAC 5-80-720 B	VOC	NA
TK1201	No.2 Fuel Oil, Bulk Storage	9 VAC 5-80-720 B	VOC	NA
TK0801	Used Oil	9 VAC 5-80-720 B	VOC	NA
TK1101	Emerg. Gen. Bulk Storage	9 VAC 5-80-720 B	VOC	NA
B2				
TK0601	Lube Oil Reservoir	9 VAC 5-80-720 B	VOC	N/A
TK0602	Lube Oil Conditioner	9 VAC 5-80-720 C	VOC	155 gal.
TK0701	Lube Oil Reservoir	9 VAC 5-80-720 B	VOC	N/A
TK0702	Lube Oil Conditioner	9 VAC 5-80-720 C	VOC	215 gal.
B100				
TK0101	B100 Emerg Gen Day Tank	9 VAC 5-80-720 B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
L 1				
TK2801	Emerg. Gen. Day Tank, ART Bldg.	9 VAC 5-80-720 B	VOC	NA
TK2901	Emerg. Fire Pump Day Tank	9 VAC 5-80-720 B	VOC	NA
L 3				
TK2201& 2301	Tanks (Out of Service)	9 VAC 5-80-720 B	VOC	NA
TK2401	Bulk Storage Tank	9 VAC 5-80-720 B	VOC	NA
TK4701-4702 TK4801-4802	Bulk Storage Tanks	9 VAC 5-80-720 B	VOC	NA
W1				
TK0601	Generator, Bulk Storage	9 VAC 5-80-720 B	VOC	NA
TK0701	Unleaded Gasoline	9 VAC 5-80-720 B	VOC	NA
TK0801	Vehicle Fueling Diesel Tank	9 VAC 5-80-720 B	VOC	NA
TK0501	WTP Gen. Day Tank	9 VAC 5-80-720 B	VOC	NA
PX0101	WTP Gen. Supply Line	9 VAC 5-80-720 B	VOC	NA
W2				
TK0201, TK0501 & 0502 TK1101	Bulk Storage Tanks	9 VAC 5-80-720 B	VOC	NA
TK0701	WWTP Generator Day Tank	9 VAC 5-80-720 B	VOC	NA
PX0101	WWTP Generator Supply Line	9 VAC 5-80-720 B	VOC	NA
MT0401-0402	WWTP Day Tanks	9 VAC 5-80-720 B	VOC	NA
Process Equipment				
L1				
MT0101-0102	Tanks	9 VAC 5-80-720 B	VOC	NA
TK0101	Tank	9 VAC 5-80-720 B	VOC	NA
TK2301	Tank	9 VAC 5-80-720 B	VOC	NA
TK0201	Tank	9 VAC 5-80-720 B	VOC	NA
TK2501-2503	Tanks	9 VAC 5-80-720 B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
TK2401-2403 MT0201-0202				
SS0101-0104	Screens	9 VAC 5-80-720 B	VOC	NA
TK0301	Tank	9 VAC 5-80-720 B	VOC	NA
TK0401-0402	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1501	Level Box	9 VAC 5-80-720 B	VOC	NA
SK0101-0102	Rejects Tanks	9 VAC 5-80-720 B	VOC	NA
EV0101-0103	Evaporators	9 VAC 5-80-720 B	VOC	NA
ST0101	Tank	9 VAC 5-80-720 B	VOC	NA
CT0101-0102	Cooling Towers	9 VAC 5-80-720 B	VOC	NA
TK0601-0602	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1601, 1701 & 1801	Standpipes	9 VAC 5-80-720 B	VOC	NA
TK2201	Tank	9 VAC 5-80-720 B	VOC	NA
TK0701-0702 TK1101-1103 TK0501	Tanks	9 VAC 5-80-720 B	VOC	NA
MT0301, MT0401, TK1201	Tanks	9 VAC 5-80-720 B	VOC	NA
TK1901, 2001, 2101 & 3001	Flavor Tanks	9 VAC 5-80-720 B	VOC	NA
TK0801, 0901, 1401, BX0101, 0201, 0301 FP0101, SS0201 &	Sheet Forming Equipment	9 VAC 5-80-720 B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
LD0101				
TK1301	Scrubber Tank	9 VAC 5-80-720 B	VOC	NA
SK0201-0202 TK1001-1002	Tanks	9 VAC 5-80-720 B	VOC	NA
ST0201	Tank	9 VAC 5-80-720 B	VOC	NA
L 2				
MT0101-0102	Tanks	9 VAC 5-80-720 B	VOC	NA
TK0101	Tank	9 VAC 5-80-720 B	VOC	NA
TK2201	Tank	9 VAC 5-80-720 B	VOC	NA
TK0201	Tank	9 VAC 5-80-720 B	VOC	NA
TK3101-3103 TK2301-2303 MT0201-0202	Tanks	9 VAC 5-80-720 B	VOC	NA
SS0101-0104	Screens	9 VAC 5-80-720 B	VOC	NA
TK0301	Tank	9 VAC 5-80-720 B	VOC	NA
TK0401-0402	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1501	Level Box	9 VAC 5-80-720 B	VOC	NA
SK0101-0102	Rejects Tanks	9 VAC 5-80-720 B	VOC	NA
EV0101-0103	Evaporators	9 VAC 5-80-720 B	VOC	NA
ST0101	Tank	9 VAC 5-80-720 B	VOC	NA
CT0101-0102	Cooling Towers	9 VAC 5-80-720 B	VOC	NA
TK0601-0602	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1801, 1901 & 2001	Standpipes	9 VAC 5-80-720 B	VOC	NA
TK1701	Tank	9 VAC 5-80-720 B	VOC	NA
TK1301	Supply Tank	9 VAC 5-80-720 B	VOC	NA
TK0701-0702 TK1101-	Tanks	9 VAC 5-80-720 B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
1103 TK0501				
MT0301, TK1201, 2601, 2701, 2801	Tanks	9 VAC 5-80-720 B	VOC	NA
TK2401 & TK3201	Flavor Tanks	9 VAC 5-80-720 B	VOC	NA
TK0801, 0901, 1401, BX0101, 0201, 0301, FP0101; SS0201, LD0101	Sheet Forming Equipment	9 VAC 5-80-720 B	VOC	NA
TK2901	Scrubber Tank	9 VAC 5-80-720 B	VOC	NA
SK0201- 0202 TK1001- 1002	Tanks	9 VAC 5-80-720 B	VOC	NA
ST0201	Tank	9 VAC 5-80-720 B	VOC	NA
CT0201	Cooling Tower	9 VAC 5-80-720 B	VOC	NA
L3				
TK2001	Tank	9 VAC 5-80-720 B	VOC	NA
TK1901 MT0401- 0402	Tanks	9 VAC 5-80-720 B	VOC	NA
TK1001, 2101- 2102, MT0101- 0102	Tanks	9 VAC 5-80-720 B	VOC	NA
TK0301- 0303 TK1101- 1103	Tanks	9 VAC 5-80-720 B	VOC	NA
TK3801	Tank	9 VAC 5-80-720 B	VOC	NA
TK0801-	Tanks	9 VAC 5-80-720 B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0803 TK0901 TK1201-1203				
TK0201	Level Box	9 VAC 5-80-720 B	VOC	NA
TK0401-0402 SK0201-0202	Tanks	9 VAC 5-80-720 B	VOC	NA
TK0501-0502	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
EV0101-0103	Evaporators	9 VAC 5-80-720 B	VOC	NA
ST0101	Tank	9 VAC 5-80-720 B	VOC	NA
CT0101-0102	Cooling Towers (2)	9 VAC 5-80-720 B	VOC	NA
PU0101	Pump	9 VAC 5-80-720 B	VOC	NA
EV0201	Evaporator	9 VAC 5-80-720 B	VOC	NA
CT0201	Cooling Tower	9 VAC 5-80-720 B	VOC	NA
TK2501	Tank	9 VAC 5-80-720 B	VOC	NA
MT0301, TK1301, 3001, 3201 & 3301	Tanks	9 VAC 5-80-720 B	VOC	NA
TK2901 & TK3101	Flavor Tanks	9 VAC 5-80-720 B	VOC	NA
TK0601-0602 TK0701-0703 & TK1501	Tanks	9 VAC 5-80-720 B	VOC	NA
TK2601&2701	Standpipes	9 VAC 5-80-720 B	VOC	NA
MT0501, TK1601, 1401 & 2801, BX0101-0301,	Sheet Forming Equipment	9 VAC 5-80-720 B	VOC	NA

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
FP0101; SS0201-0202; LD0101				
SK0101 TK1701-1702	Tanks	9 VAC 5-80-720 B	VOC	NA
ST0201	Tank	9 VAC 5-80-720 B	VOC	NA
CT0301	Cooling Tower	9 VAC 5-80-720 B	VOC	NA
TK4001-4101 TK4301-4401	Flavor Tanks	9 VAC 5-80-720 B	VOC	NA
W2				
TK0101-0102	WWTP Equalization Basins	9 VAC 5-80-720 B	VOC	NA
LD0101-0102 LD0201-0202 LD0301-0302 LD0401-0405 LD0501-0503	WWTP Bar Racks, Grit Chambers, Screens, Primary Clarifiers, and Thickeners	9 VAC 5-80-720 B	VOC	NA
MT0101-0105	WWTP Aeration Basins	9 VAC 5-80-720 B	VOC	NA
MT0201	WWTP Flocculation Tank	9 VAC 5-80-720 B	VOC	NA
LD0601-0606	WWTP Secondary Clarifiers	9 VAC 5-80-720 B	VOC	NA
MT0301-0302	WWTP Chlorine Contact Tanks	9 VAC 5-80-720 B	VOC	NA
SF0301-0306	WWTP Gravity Filters	9 VAC 5-80-720 B	VOC	NA
MT0501, TK0901	Tanks	9 VAC 5-80-720 B	VOC	NA
Generators/Pump				
024B1 EG0101	Boiler House Emergency Generator	9 VAC 5-80-720 C	NA	298 hp (200 kW)
024 B1	Boiler House Emergency	9 VAC 5-80-720 C	NA	298 hp (200 kW)

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
EG0102	Generator			
024 L1 EG0101	ART Pilot Plant Emergency Generator	9 VAC 5-80-720 C	NA	55 hp (37 kW)
024 L1 EG0201	Fire System Emergency Pump	9 VAC 5-80-720 C	NA	142 hp
041 L1 EG0101	Bermuda Hundred – Emergency Generator	9 VAC 5-80-720 C	NA	372 hp (250 kW)
Miscellaneous Operations				
EH0101- 0103	Maintenance Shop Exhaust Hoods	9 VAC 5-80-720 B	VOC, PM, PM10	NA
Various	Shop Parts Washers	9 VAC 5-80-720 B	VOC	NA
Various	Hydraulic Oil Tanks	9 VAC 5-80-720 B	VOC	NA
	Warehouses (3)	9 VAC 5-80-720 B	HAP	NA

*: The volatile organic compounds stored or transferred in the units listed above have a vapor pressure less than 1.5 pounds per square inch absolute under actual storage or filling conditions.

The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION – NA

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Richmond Times Dispatch from October 16, 2004 to November 14, 2004 (At close of day) .